

Laserjet 1005 Series vs OSX 10.10 Yosemite

Howto:

Step 1:

General issues for printing in Yosemite have been dealt with within the install script of foo2zjs. (Sandboxing issues etc. =OK --- Need to give hint for repairing file permissions?)

Step 2: Install Ghostscript & Foomatic –RIP.

Install Ghostscript for Mac OSX. The file I used: gplgs-8.71.dmg

Install Foomatic-Rip for Mac OSX. The file I used: foomatic-rip-4.0.6.203.dmg

Note: Since foomatic-rip 4.0 and newer, foomatic- gs wrapper is no longer needed to install. (see google)

Step 3:

Since you need to compile the binaries, you will need the tools for that. I installed the OSX command line tools only: for OSX10.10 it was possible to download command line tools only, without the need to have the full X-code package lingering on your harddrive, unused- in my case.

→ Download and install Command line tools for OSX 10.10: I used this file: commandlinetoolsosx10.10forxcode6.3.2.dmg

Step 4:

-Download and install install macports from macports.org

I used this file: MacPorts-2.3.3-10.10-Yosemite

Then update macports in the terminal by the following command:

```
sudo port -v selfupdate
```

Step 5:

Download foo2zjs from www.foo2zjs.rkkda.com (see download and install instruction section)

Expand the downloaded .tar.gz file, it will expand into a folder. Go into that folder with the the terminal:

For example:

```
cd /Users/Username/Downloads/foo2zjs
```

```
Sudo make
```

(this gave an error in dependencies – I needed to install gsed to perform the build)

```
sudo port install gsed
```

When gsed is downloaded, you can try making again,

```
Sudo make
```

Now, you need the download the firmware file that the printer needs every time the printer starts up. The foo2zjs has instructions for multiple printers:

In this case for the laserjet 1005 series just type
`./getweb 1005` (and it will automatically download an .img file in the directory)

Now you're ready to deploy all the files to the designated locations, i.e. installing

```
sudo make install
```

AND very handy: hotplug. This installs an app that automatically connects and uploads the firmware to the printer when it starts up.

```
sudo make install-hotplug
```

To make sure the changes take effect, you must restart CUPS : (command in OSX 10.10 is somewhat different than in previous versions of OSX)

```
sudo launchctl stop org.cups.cupsd
```

Step 6:

Install the printer in OSX preferences-printer & scanner OR through the CUPS webinterface : localhost:631.

A: Connected through USB

It shows up in the list of local printers. Use that one, select the HP Laserjet 1005 Foomatic/foo2zjs PPD driver (should be listed in PPD collection if foo2zjs was properly installed).

Edit some options, finished!

Note:

Possible to send the driver file to the printer manually (note: -d option specifies specific printer (with the specific name here)) if no -d option, sends to default printer!

```
lp -d HP_LaserJet_1005_series -oraw usr/share/foo2zjs/firmware/sihp1005.dl
```

This is not necessary if you have hotplug installed.

B: Connected through a Synology NAS (DSM 5.2) by Bonjour

Connect printer to NAS,

It shows up in the list of suggested remote printers in CUPS, when adding a printer.

Choose IPP printing, but you will use Bonjour to connect to the printer.

Enter the following url:

```
Dnssd://usbprinter2%20%40%20DiskStation._printer._tcp.local
```

Select the HP Laserjet 1005 Foomatic/foo2zjs PPD driver (should be listed in PPD collection if foo2zjs was properly installed).

Edit some options, finished!

IMPORTANT Note:

When connected over the network, the client where the printer is installed, sees the printer as a local printer (the NAS only connects the printer and handles raw bits to the printer. Hence the zjs type printer still needs to be initiated with its firmware file. Hotplug does not send the firmware to the printer over the network when it is connected or it starts up. I assume the script only listens on direct USB connections.

Hence it is necessary to send the driver file to the printer manually (note: -d option specifies specific printer (with the specific name) if no -d option, sends to default printer!

```
lp -oraw usr/share/foo2zjs/firmware/sihp1005.dl
```

Note to self/ question : Since the firmware is passed through the printer as if it were a print job, not sure if the printer can be initialised from a script on NAS, where the printer is not installed as a printer with cups etc etc... (maybe possible to send the printer this file on regular basis like cronjob or sth... need to check if lp -oraw can be simulated by some raw IO command.